Special Issue

Recent Progress in Food Gels: From Fundamentals to Applications

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue entitled “Recent Progress in Food Gels: From Fundamentals to Applications”, which is dedicated to the latest advancements in gels and their applications in food science. Gels are versatile soft materials with diverse structures and functionalities, making them essential in food design, processing, and innovation. This Special Issue will explore the formation, characterization, and modification of food-grade gels, as well as their role in texture modification, nutrient delivery, and sustainable food development. Topics of interest include, but are not limited to, the following:

- Hydrogels, aerogels, and oleogels in food formulations;
- Biopolymer-based gels (proteins, polysaccharides, hybrids);
- Rheology, stability, and microstructure of food gels;
- 3D printing and encapsulation for functional foods;
- Smart and responsive gels for controlled release;
- Plant-based and alternative protein gels;
- Gels in dairy, meat, and bakery applications.

Guest Editors

Dr. Sara Nunes Silva

CBQF—Centro de Biotecnologia e Química Fina—Laboratório Associado, Escola Superior de Biotecnologia, Universidade Católica Portuguesa, 4200-374 Porto, Portugal

Dr. Qin Hou

Key Laboratory of Chinese Cuisine Intangible Cultural Heritage Technology Inheritance, Ministry of Culture and Tourism, College of Tourism and Culinary Science, Yangzhou University, Yangzhou 225127, China

Deadline for manuscript submissions

31 May 2026

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/249008

Gels
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
gels@mdpi.com

mdpi.com/journal/gels

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/journal/gels

MDPI

About the Journal

Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

Editor-in-Chief

Prof. Dr. Esmaiel Jabbari
Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

Author Benefits

High visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).